

Claims

- [c1] WHAT IS CLAIMED IS:
- 1.A device for enveloping inserts in an envelope, comprising:
at least one feeder for supplying first and second articles (1, 1', 1", 57);
means for transporting the first and second articles received from the at least one feeder and arranged downstream of the at least one feeder;
a first adhesive station (15) comprising at least one applicator unit (16, 17) and configured to apply an adhesive onto the first article (1') provided for forming an envelope, wherein the envelope is produced from the first article (1') without waste;
wherein the at least one applicator unit (16, 17) is stationary during application of the adhesive onto the first article (1').
- [c2] 2.The device according to claim 1, wherein the at least one applicator unit (16, 17) is arranged in the area of an edge (21, 22) of the first article (1'), which edge (21, 22) extends in a transport direction of the means for transporting.
- [c3] 3.The device according to claim 1, wherein the first adhesive station (15) has two applicator units (16, 17).
- [c4] 4.The device according to claim 3, wherein the two applicator units (16, 17) are arranged in the area of the edges (21, 22) of the first article (1'), which edges (21, 22) extend in a transport direction of the means for transporting.
- [c5] 5. The device according to claim 1, further comprising a second adhesive station (37), wherein the first and second adhesive stations (15, 37) are arranged angularly to one another relative to a transport direction of the first article (1').
- [c6] 6. The device according to claim 5, further comprising an erecting unit (27) positioned between the first and second adhesive stations (15, 37), wherein the erecting unit (27) moves the first article (1') into an upright position when the first article (1') passes from the first adhesive station (15) to the second adhesive station (37).
- [c7] 7. The device according to claim 6, further comprising an insert folding device

(51) configured to fold the second articles (1", 57) to inserts, wherein the first adhesive station (15) is arranged upstream of the insert folding device (51) in a transport direction of the first article (1').

- [c8] 8. The device according to claim 6, wherein the first and second adhesive stations (15, 37) are configured to apply a hot-setting adhesive.
- [c9] 9. The device according to claim 7, wherein the inserts folded in the insert folding device (51) are transported on an insert transport path, wherein the transport path of the first article (1') is a branch path of the insert transport path, wherein the first and second adhesive stations (15, 37) are positioned in the branch path.
- [c10] 10. The device according to claim 7, wherein the first and second adhesive stations (15, 37) in the transport direction of the first article (1') are arranged downstream of the insert folding device (51).
- [c11] 11. The device according to claim 10, wherein the first and second adhesive stations (15, 37) are configured to apply a cold-setting adhesive.
- [c12] 12. The device according to claim 7, wherein the means for transporting comprise at least one vacuum drum (8, 81) and a stop (6, 80) correlated with the at least one vacuum drum (6, 80), wherein the at least one vacuum drum (8, 81) transports the first and second articles in a direction toward the stop (6, 80).
- [c13] 13. The device according to claim 12, wherein the at least one vacuum drum (8, 81) is connected to a vacuum source.
- [c14] 14. The device according to claim 13, wherein the at least one vacuum drum (8, 81) has a peripheral surface provided with through openings (9).
- [c15] 15. The device according to claim 12, wherein the at least one vacuum drum (8, 81) has a peripheral surface provided with a friction coating.
- [c16] 16. The device according to claim 12, further comprising at least one sensor (31) arranged in the area of the at least one vacuum drum (8, 81), wherein the

at least one sensor (31) is positioned in a transport path of the first and second articles (1', 1", 57).

- [c17] 17. The device according to claim 16, wherein the at least one sensor (31) is configured to switch vacuum from the at least one vacuum drum (8, 81) to a transport device (82, 93) of the means for transporting.
- [c18] 18. The device according to claim 17, wherein the transport device (82, 93) has a conveying direction (33, 99) oriented perpendicularly to a conveying direction (32, 97) of the at least one vacuum drum (6, 81).
- [c19] 19. The device according to claim 17, wherein the transport device is comprised of at least one vacuum belt (82).
- [c20] 20. The device according to claim 19, wherein the at least one vacuum belt (82) is an endless circulating belt.
- [c21] 21. The device according to claim 19, wherein the at least one vacuum belt (82) is provided with openings (26).
- [c22] 22. The device according to claim 19, wherein the at least one vacuum belt (82) is connected to a vacuum source.
- [c23] 23. The device according to claim 1, further comprising at least one deflection unit (93) configured to change a transport direction of the first and second articles.
- [c24] 24. The device according to claim 23, wherein the deflection device (93) has at least one roller pair with rollers (94) driven in opposite directions.
- [c25] 25. The device according to claim 24, wherein the rollers (94) have axes of rotation (100) are positioned in a feed direction (99) of the first and second articles (1, 1', 1", 57).
- [c26] 26. The device according to claim 24, wherein the rollers (94) have a flattened side (95).
- [c27] 27. The device according to claim 26, wherein the rollers (94) have an initial

position in which the flattened sides, which are parallel in the initial position, of the rollers (94) delimit a free space (96), wherein the first and second articles (1', 1'', 57) are fed in the feed direction (99) into the free space (96).

- [c28] 28. The device according to claim 25, wherein the axes of rotation (100) of the rollers (94) are positioned perpendicularly to a stop (6) for the first and second articles (1', 1'', 57).
- [c29] 29. The device according to claim 25, wherein the axes of rotation (100) of the rollers (94) are positioned in a plane perpendicular to the feed direction (99).
- [c30] 30. The device according to claim 1, further comprising at least one folding unit (67, 86) having at least one folding element (70, 71; 87, 88) which is adjustable transverse to a transport direction of the first and second articles.
- [c31] 31. The device according to claim 30, wherein the at least one folding element (70, 71; 87, 88) is a roller rotatable about an axis extending in the transport direction of the first and second articles (1', 1'', 57).
- [c32] 32. The device according to claim 30, wherein the at least one folding element (70, 71; 87, 88) is arranged above a transport path for the first and second articles.
- [c33] 33. The device according to claim 30, wherein the at least one folding unit (67, 86) in the transport direction of the first and second articles (1', 1'', 57) has two of the folding elements (70, 71; 87, 88) positioned sequentially behind one another.
- [c34] 34. The device according to claim 33, wherein the two folding elements (70, 71; 87, 88) are adjustable independently from one another transversely to the transport direction of the first and second articles (1', 1'', 57).
- [c35] 35. The device according to claim 30, wherein the at least one folding element (70, 71; 87, 88) in the transport direction of the first and second articles (1, 1'', 57) is positioned behind erecting means (68, 69; 89) arranged in a movement path of laterally projecting flaps (65, 66; 79) of the first article (1').

- [c36] 36. The device according to claim 35, wherein the erecting means (68, 69; 89) are wing-shaped.
- [c37] 37. The device according to claim 35, wherein the erecting means (68, 69; 89) extend counter to the transport direction of the first and second articles (1'; 1", 57) at a slant outwardly.
- [c38] 38. The device according to claim 35, wherein the erecting means (68,69; 89) are upright.
- [c39] 39. The device according to claim 1, further comprising an insert folding device (51) configured to fold the second articles (1", 57) to inserts, wherein the insert folding device (51) has two folding rollers (52, 53).
- [c40] 40. The device according to claim 39, wherein the insert folding device (51) has a folding blade (106) arranged upstream of the two folding rollers (52, 53).
- [c41] 41. The device according to claim 40, wherein the folding blade (106) is adjustable in the direction toward a roller gap between the two folding rollers (52, 53).
- [c42] 42. The device according to claim 40, wherein the second articles (1", 57) to be enveloped are supplied on the folding blade (106).
- [c43] 43. The device according to claim 39, wherein the second articles to be enveloped (1", 57) and the first articles (1') forming the envelope are supplied transversely relative to one another to the insert folding device (51).
- [c44] 44. The device according to claim 39, wherein the insert folding device (51) has a stop (102) for the first article (1') forming the envelope.